Subject: IDL's EPS thumbnail image Posted by soc on Wed, 02 Aug 1995 07:00:00 GMT

View Forum Message <> Reply to Message

Hi,

I use EPS files quite regularly, and the more files I generate, the more annoyed I become. This is because the thumbnail image contained in the .eps file is not supported by any of the packages I use - in particular the windows eps filter which is used for word and my dvi viewer. .eps files created by XV (for example) do work with this graphics filter, so the problem does not lie there (not completely at least!).

I can find no refernce to my problem in the faq.

The manual describes the format as "EPSI", I have no idea what this format is, but its not TIFF anyway!!

In the ideal world, someone would post a uuencoded EPSI supporting .eps graphics filter for windows to the group! but failing that, does anyone out there have any suggestions? Maybe there is a program that converts the thumbnail image to something readable.

I expect from talking to other people that use IDL that this is a problem that annoys many users, if it comes down to it, people could email me and I could use this as a petition for RSI to help sort it out.

Sorry for the wordy post, thanks for reading, any help would be greatly appreciated,

Rob O'Connell.

Subject: Re: IDL's EPS thumbnail image Posted by Troy Klein on Wed, 02 Aug 1995 07:00:00 GMT View Forum Message <> Reply to Message

The following is a question and answer I'm going to forward to the maintainer of the IDL FAQ.

Question:

Why don't my desktop PC applications recognize the preview portion of IDL EPSI files?

Answer:

Quoting the IDL version 4.0 online help for the PREVIEW keyword, "Set this

keyword to add a 'device independent screen preview' to the PostScript output file, in encapsulated PostScript interchange format (EPSI). Use this keyword only with encapsulated output. Many, but certainly not all, desktop publishing and word processing programs will display this screen preview when the file is imported into a document."

The EPSI format is not compatible with some of the more popular Windows and Macintosh applications. Windows applications expect the preview image to be in TIFF format and Macintosh applications expect the preview image to be in PICT format and in the resource fork of the EPS file. I have found the EPSI file to be compatable with Framemaker for UNIX/X windows.

There are two workarounds available for Mac users and one for Windows users, all are similar. If you are using IDL on a UNIX machine, there is a package available (as of 8/2/95) on the popular University of Michigan Mac shareware/freeware archive titled "ps2epsmac," which uses Ghostscript and NetPBM on a UNIX machine to interpret the postscript and create a new EPS file in Macbinary format with the PICT preview. There are several Mac programs available (StuffitExpander, Fetch, etc.) to interpret the Macbinary file. I have had great success in using this method to import IDL EPS files into Word, Powerpoint, and MacDraw Pro. There is a similar package at the archive titled "ps2epsplus" which does the same thing, but all on a Mac.

For UNIX IDL users trying to import IDL EPS files into Windows applications, there is a package called "ps2epsf" which can be located using an Archie search. This package essentially does the same thing as the UNIX/Mac package but produces an EPS file with a TIFF preview.

I hope this information helps. Troy.

P.S. Below is a message to and from RSI/IDL support about the EPSI incompatabiliy.

From support@rsinc.com Mon Mar 6 16:08 EST 1995

Return-Path: <support@rsinc.com>

Date: Mon, 6 Mar 1995 13:39:22 -0700 (MST) From: RSI email support <support@rsinc.com> To: Troy Klein <troy.klein@aplmail.jhuapl.edu> Cc: "Kevin G. Jackson" <wk09458@worldlink.com>

Subject: Re: FW: EPS Preview

> From: Troy Klein

> To: info

> Subject: EPS Preview

> Date: Thursday, March 02, 1995 12:38PM

- > As of version 3.6.1 of IDL, the preview portion of encapsulated postscript
- > output does not appear to be compatible with Macintosh and PC applications. I

- > believe this is because Macintosh applications expect the preview to have
- > PICT format and PC applications expect the preview to have the TIFF format
- > instead of the "device independent screen preview" that IDL currently uses.

>

- > There is a workaround by using the freely available programs ghostscript,
- > netpbm, ps2epsmac (for Macintosh EPS files) and ps2epsf (for PC EPS files).
- > These programs are available at many FTP sites on the Internet.

>

- > I would like to know if version 4.0 of IDL contains any improvements for EPS
- > output (i.e. does it produce EPS files with previews that are compatible
- > with
- > Mac's and/or PC's?). If not, are there any improvements planned for the
- > near
- > future?

- > If version 4.0 has no improvements and none are planned, then I will suggest
- > to Ray Sterner (maintainer of the IDL FAQ) that he add some information to
- > the IDL FAQ regarding the workaround, metioned above, for importing EPS
- > files
- > on personal computers.

- > Thanks.
- > Troy Klein
- > Johns Hopkins University / Applied Physics Laboratory
- > trov.klein@ihuapl.edu

>

Troy,

Our initial notes entry for the preview feature notes that this may be the case for some programs:

There is a new keyword, PREVIEW, for the PostScript driver. The PostScript driver will now optionally add to the output file a "device independent screen preview". in encapsulated PostScript interchange format (EPSI). Use this keyword only with encapsulated output. Many, but certainly not all, desktop publishing and word processing programs will display this screen preview with the document. ...

I believe this format preview was chosen as the best alternative to satisfy as many programs as possible. At present I know of no changes to this area. Thanks for passing on your suggestions, however. I'll forward your suggestions on so that perhaps this area can be improved in the future.

Regards,

Alan

Subject: Re: IDL's EPS thumbnail image Posted by Troy Klein on Thu, 03 Aug 1995 07:00:00 GMT View Forum Message <> Reply to Message

Here's some additional info about using IDL's EPS output.

By using the packages described my previous reply/post you can create a plain postscript file with IDL, process it with the software in the packages, ftp the result to a Mac or PC, and then paste/import the resulting EPSF file into your Mac/PC application of choice that recognizes EPSF files.

This allows you to:

- 1) view a low resolution image of the IDL postscript in your application
- 2) easily add annotation to the IDL graphics
- 3) cover up any unwanted part of the IDL graphics
- 4) print with the same resolution as the orginal postscript
- 5) keep all your IDL graphics together in a single document
- 6) easily find and reuse IDL graphics if needed

This is how I do all my IDL graphics now. Rather than mess with all the graphical formatting keywords and options in IDL, I simply use it to get the basic graph or image into postscript and then I add most of the annotation with Powerpoint or MacDraw Pro on a Macintosh. This allows you to interactively add/modify the annotation without having to reproduce the IDL graphics over and over again. In fact I can do all of this on my HP 735 with MAE (Macintosh Application Environment) from Apple. MAE is essentially MacOS that runs in an X window. If you have access to the World Wide Web check out http://www.mae.apple.com/.

Once the IDL graphics is in a document, I can print selected pages or copy and paste them into other documents. You can even scale the graphics if you wish. You can mix the graphics into a report or into presentation slides.

Now about the packages. I think the best way to track down the Mac packages right now is at the Web page http://vsl.cnet.com/cgi-bin/shase. This page allows you to search the software archives for various platforms by filename or description. If you don't have Web access, then the packages can be ftp'd from a mirror of the umi-mac archive, mirror.aol.com in the directories /pub/mac/util/text/ and /pub/mac/util/unix/. The PC package unfortunately doesn't turn up in the archive search, so you have to turn to Archie. A good Archie Web interface that I use is at http://hoohoo.ncsa.uiuc.edu/archie.html. One of the places it found ps2epsf is at ftp.cs.orst.edu in the directory /localsrc/graphics.

Even though I haven't personally tried the PC package ps2epsf, I expect it to work as well as the Mac packages because the Mac packages were derived from ps2epsf. The difference between the Mac packages is ps2epsmac was written for UNIX and ps2epsplus was compiled for Mac. ps2epsplus is nice because it has a friendly Mac interface, however if you have a 6 year old Mac like me, it going to run fairly slow. That's why I use ps2epsmac. If you have some complicated IDL graphics (contour plots, surface plots and images for example) it could mean minutes on the Mac instead of seconds on a UNIX box.

A couple notes:

The documentation for ps2epsmac claims that the color preview has 8 bit resolution. For my particular setup I have found this to not be the case, it's more like 3 or 4 bits. As it turns out I think this better because the file is smaller, yet I still get enough different colors to figure out what is what in the picture. Also I had to modify the main shell script file to get a fitted bounding box around the graphics and a color preview at the same time. You can get a color preview with the original script but must stick with the original bounding box in the postscript file.

Hope this info helps you produce some really nice looking IDL output. Troy.

Subject: Re: IDL's EPS thumbnail image Posted by Mark Hadfield on Sun, 06 Aug 1995 07:00:00 GMT View Forum Message <> Reply to Message

soc@festival.ed.ac.uk (Stephen O'Connell) wrote:

> Hi,

>

- > I use EPS files quite regularly, and the more files I generate, the more
- > annoyed I become. This is because the thumbnail image contained in the
- > .eps file is not supported by any of the packages I use in particular
- > the windows eps filter which is used for word and my dvi viewer.

_

For Word for Windows you need a preview image in TIFF or WMF (Windows metafile format) format. Preview images in either format can be added by GSView (ftp://ftp.cs.wisc.edu/ghost/rjl). This program is a Windows front-end to the Ghostscript Postscript interpreter (ftp://ftp.cs.wisc.edu/ghost/aladdin).

WMF previews support colour, but there are various problems, eg if they are too large the Word PS filter crashes! So I use TIFF 4.

--

Mark Hadfield NIWA (Taihoro Nukurangi) Wellington, New Zealand

hadfield@storm.greta.cri.nz NIWA.GRETA:HADFIELD

Subject: Re: IDL's EPS thumbnail image

Posted by gurman on Tue, 08 Aug 1995 07:00:00 GMT

View Forum Message <> Reply to Message

In article <403eto\$k12@zephyr.grace.cri.nz>, Mark Hadfield <hadfield@storm.greta.cri.nz> wrote:

- > soc@festival.ed.ac.uk (Stephen O'Connell) wrote:
- >> Hi,

>>

- >> I use EPS files quite regularly, and the more files I generate, the more
- >> annoyed I become. This is because the thumbnail image contained in the
- >> .eps file is not supported by any of the packages I use in particular
- >> the windows eps filter which is used for word and my dvi viewer.

>>

>

- > For Word for Windows you need a preview image in TIFF or WMF (Windows
- > metafile format) format. Preview images in either format can be added by
- > GSView (ftp://ftp.cs.wisc.edu/ghost/rjl). This program is a Windows
- > front-end to the Ghostscript Postscript interpreter
- > (ftp://ftp.cs.wisc.edu/ghost/aladdin).

>

- > WMF previews support colour, but there are various problems, eg if they are
- > too large the Word PS filter crashes! So I use TIFF 4.

Wow! A Microsoft product for Windows crashing.... and I thought that was only for the MS products for the Mac.

Would RSI care to comment on why they can't implement an EPSF preview that would allow one to choose the preview format (TIFF, WMF, PICT, scaled-down EPS, &c.) or at least the target platform? Ot maybe they

can....

Inquiring minds want to know....

Joe Gurman

Joseph B. Gurman / NASA Goddard Space Flight Center/ Solar Data Analysis Center / Code 682 / Greenbelt MD 20771 USA / gurman@uvsp.gsfc.nasa.gov | Federal employees are still prohibited from holding opinions while at work. Any opinions expressed herein must therefore be someone else's.